

PRELIMINARY CHECKLIST OF THE VASCULAR PLANTS  
OF FERSTER WOODS, WEST-CENTRAL ILLINOIS

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ABSTRACT: A total of 259 species of vascular plants representing three divisions and 70 families have been collected at Ferster Woods, an upland mesic woods, in McDonough County, Illinois. Two Illinois threatened species (Hydrastis canadensis L. and Panax quinquefolius L.) and three new county records (Hydrastis canadensis L., Allium tricoccum Ait. var. burdickii Hanes and Brachyelytrum erectum (Schreb.) Beauv.) were found.

In 1983, Teresa Ferster Glazier, a former lecturer in the Department of English at Western Illinois University, donated a 30 acre tract of forested land to The Nature Conservancy for preservation as well as for biological instruction and research purposes. In 1984 The Nature Conservancy deeded it to Western Illinois University. It was named Ferster Woods by the donor and by the previous owner, Erwin Benson, to honor their ancestors who farmed the fields adjoining the woods. Benson had for years treated the area as a bird sanctuary. The woods is located about five miles northeast of Macomb, McDonough County, Illinois in section 23 of Macomb township. This paper presents a checklist of the vascular plants found in Ferster Woods primarily as a result of at least a monthly survey from March through October 1983. Voucher herbarium specimens are being prepared and will be deposited in the R. M. Myers Herbarium of Western Illinois University (MWI).

Ferster Woods is an upland mesic woods dissected by several, sometimes steep-sided intermittent streams along which such characteristic plants as Onoclea, Impatiens, Glyceria, and Laportea occur. The forest is basically oak-hickory with the dominant trees being Carya ovata, Quercus alba and Q. rubra. There is much linden or basswood (Tilia americana) throughout and many of the hickories are bitternut (Carya cordiformis) confirming the mesic nature of the woods. Major understory trees are Ulmus, Celtis, Crataegus and Prunus serotina. Extensive logging in the past is evidenced by the many stumps with sprouts, the absence of a higher proportion of oaks, the numerous rather young trees, and fewer larger trees than might be expected. Some of the common shrubs are Xanthoxylum, Toxicodendron, Corylus, Sambucus, Symphoricarpos, Rubus and Ribes.

Due to minimal grazing (predominately near the north edge) the herbaceous layer is well developed and diverse. In the spring the woods is beautifully carpeted with plants such as Dicentra, Claytonia, Anemonella, Dentaria, Mertensia, Osmorhiza, Podophyllum, Erythronium,

Polemonium, Phlox, Viola, Hydrophyllum, and Tradescantia virginiana. Notable herbaceous plants are Caulophyllum thalictroides in its only known McDonough county station, and two Illinois threatened plants Panax quinquefolius and Hydrastis canadensis. The latter is quite abundant and is the only known extant colony in McDonough county per Bowles et al. (1981). Hydrastis canadensis (per Mohlenbrock (1981), Allium tricoccum var. burdickii (per Jones and Schildneck (1979)), which is also abundant, and Brachyelytrum erectum (per Mohlenbrock and Ladd (1978)) are county records.

Ferster Woods borders a cultivated field along the northern half of the western edge and also along the southern edge. Here are found some weedy genera such as Capsella, Lepidium, Melilotus, Sida, Bromus, Chenopodium, Ambrosia, Achillea, Erigeron, Phleum, and Setaria.

The west-central part of the area contains a soil-surface lane leading to several old buildings and some cleared ground, now an unmaintained waste area in which are found some plants persisting from cultivation. Twenty-two such species were identified in this area and are annotated with a "P" (for planted) in the List of Species. Four of these 22 species also exist spontaneously and are indicated in the List by the letters "P+S". These four are Populus deltoides and Acer saccharum which occur spontaneously as native species whereas Diospyros virginiana and Berberis thunbergii occur spontaneously as a result of escaping from cultivation. Diospyros may, however, be natural also since a collection by Teresa Ferster in 1928 is stated to occur in woods and old fields. Also some Juglans nigra may have been planted since a 1928 collection by T. Ferster is annotated as "not native".

About 500 plant specimens were collected, representing three divisions, 70 families, 180 genera and 259 species. The Polydiodiophyta (pteridophytes) was represented by two families, six genera and eight species. The Pinophyta (gymnosperms) was represented by three families, three genera and three species, all being planted. The Magnoliophyta (angiosperms) was represented by 65 families, 171 genera and 248 species of which the Magnoliopsida (dicotyledons) consisted of 55 families, 133 genera and 188 species while the Liliopsida (monocotyledons) consisted of 10 families, 38 genera and 60 species. Of the 259 species 50 (19.3%) were aliens. The largest families are the Compositae and Poaceae with 30 species each, Rosaceae (17 species), Cyperaceae and Ranunculaceae (10), Leguminosae (9), Polygonaceae and Liliaceae (8 each) and the Umbelliferae with seven species. In addition to the 259 species three varieties were collected, thus resulting in 262 specific or infraspecific taxa being found in the study area. It should be noted that there was a severe drought during the course of this inventory and that its effect on this floristic study is unknown although much stunting and decrease in the lushness of some of the plants (particularly the spring and early summer flora) was evident.

In the summer of 1928 as part of a class assignment in the Taxonomy of Herbs (Botany 30) class at Western Illinois University student Teresa Ferster prepared herbarium specimens of the following vascular plant species annotated as from or probably from Ferster Woods. In April 1983 she donated them as a gift to the R. M. Myers Herbarium at W.I.U. All species except Anemone canadensis were collected by us in 1983.

Anemone canadensis  
Diospyros virginiana ("woods and old fields")  
Galium concinnum (as G. asprellum)  
Juglans nigra ("not native")  
Phytolacca americana (as P. decandra)  
Podophyllum peltatum ("probably")  
Polygonatum commutatum ("probably")  
Quercus imbricaria  
Xanthoxylum americanum (as Zanthoxylum)

## LIST OF SPECIES

The families and genera are listed alphabetically under their respective divisions. Family and scientific (species) names follow Mohlenbrock (1975) whereas most cultivated plant names follow Bailey (1949). Annotations are: asterisk (\*) = alien, P = planted and P+S = occur both planted and spontaneously.

## DIVISION POLYPODIOPHYTA

## Ophioglossaceae

Botrychium dissectum Spreng.  
 var. obliquum (Muhl.) Clute  
Botrychium virginianum (L.) Sw.

## Polypodiaceae

Athyrium filix-femina (L.) Roth  
 var. rubellum Gilib.  
Cystopteris fragilis (L.) Bernh.  
 var. protrusa Weatherby  
Dryopteris carthusiana (Villars)  
 H.P. Fuchs  
Dryopteris cristata (L.) Gray  
Matteuccia struthiopteris (L.)  
 Todaro P  
Onoclea sensibilis L.

## DIVISION PINOPHYTA

## Cupressaceae

Juniperus virginiana L. P

## Pinaceae

Picea pungens Engelm. \*P

## Taxaceae

Taxus cuspidata Sieb. &  
 Zucc. \*P

## DIVISION MAGNOLIOPHYTA

## Acanthaceae

Ruellia humilis Nutt.

## Aceraceae

Acer negundo L.  
Acer saccharum Marsh P+S  
Acer saccharinum L.

## Anacardiaceae

Toxicodendron radicans  
 (L.) Kuntze

## Araceae

Arisaema dracontium (L.)  
 Schott  
Arisaema triphyllum (L.)  
 Schott

## Araliaceae

Panax quinquefolius L.

## Asclepiadaceae

Asclepias syriaca L.

## Balsaminaceae

Impatiens biflora Walt.Impatiens pallida Nutt.

## Berberidaceae

Berberis thunbergii DC \*P+SCaulophyllum thalictroides  
(L.) Michx.Podophyllum peltatum L.

## Betulaceae

Corylus americana Walt.

## Bignoniaceae

Catalpa speciosa Warder P

## Boraginaceae

Hackelia virginiana (L.)

I. M. Johnston

Mertensia virginica (L.)

Pers.

## Campanulaceae

Campanula americana L.Lobelia silphilitica L.Lobelia inflata L.Specularia perfoliata (L.)

A. DC. \*

## Caprifoliaceae

Lonicera prolifera (Kirchn.)

Rehd.

Sambucus canadensis L.Symphoricarpos orbiculatus

Moench

Triosteum perfoliatum L.Viburnum prunifolium L.

## Caryophyllaceae

Arenaria lateriflora L.Cerastium vulgatum L. \*Silene stellata (L.) Ait.

## Celastraceae

Celastrus scandens L.

## Chenopodiaceae

Chenopodium desiccatum

A. Nels. var.

leptophylloides (Murr.)

Wahl \*

Chenopodium album L. \*

## Commelinaceae

Commelina communis L. \*PTradescantia virginiana  
L.

## Compositae

Achillea millefolium L. \*Ambrosia trifida L.Ambrosia artemisiifolia

L.

Aster shortii Lindl.Aster cordifolius L.Aster sagittifoliusWedem. var. drummondii

(Lindl.) Shinnery

Aster pilosus Willd.Aster praealtus Poir.Aster lateriflorus (L.)

Britt.

Bidens aristosa L. var.retorsa (Sherff)

Wunderlin

Cacalia atriplicifolia L.Cirsium vulgare (Savi)

Tenore \*

Cirsium discolor (Muhl.)

Spreng.

Erigeron annuus (L.) Pers.Erigeron strigosus Muhl.Erigeron canadensis L.Eupatorium purpureum L.Eupatorium serotinum

Michx.

Eupatorium rugosum Houtt.Helianthus strumosus L.Helianthus tuberosus L.Helianthus hirsutus Raf.Lactuca canadensis L.Lactuca floridana (L.)

Gaertn.

Matricaria matricarioides

(Less.) Porter \*

Solidago ulmifolia Muhl.Solidago canadensis L.

Taraxacum officinale Weber \*  
Verbesina helianthoides Michx.  
Xanthium strumarium L. var.  
glabratum (DC.) Cronq.

## Cornaceae

Cornus racemosa Lam.

## Cruciferae

Barbarea vulgaris R. Br. var.  
arcuata (Opiz.) Fries \*  
Capsella bursa-pastoria (L.)  
 Medic. \*  
Dentaria laciniata Muhl.  
Lepidium campestre (L.) R.  
 Br. \*  
Lepidium virginicum L.  
Rorippa islandica (Oeder)  
 Borbas

## Cyperaceae

Carex rosea Schk.  
Carex sparganioides Muhl.  
Carex vulpinoidea Michx.  
Carex normalis Mack.  
Carex brevoir (Dewey) Mack.  
Carex jamesii Schwein.  
Carex hirtifolia Mack.  
Carex davisii Schwein & Torr.  
Carex grisea Wahlenb.  
Scirpus pendulus Muhl.

## Dioscoreaceae

Dioscorea villosa L.

## Ebenaceae

Diospyros virginiana L. P+S

## Euphorbiaceae

Acalypha rhomboidea Raf.

## Fagaceae

Quercus imbricaria Michx.  
Quercus rubra L.  
Quercus alba L.  
Quercus macrocarpa Michx.

## Geraniaceae

Geranium maculatum L.

## Hydrophyllaceae

Ellisia nyctelea L.

Hydrophyllum virginianum  
 L.

## Hypericaceae

Hypericum punctatum Lam.  
Hypericum pyramidatum  
 Ait.

## Iridaceae

Iris germanica L. \*P  
Sisyrinchium angustifolium Mill.

## Juglandaceae

Carya cordiformis (Wang.)  
 K. Koch  
Carya tomentosa (Poir.)  
 Nutt.  
Carya ovata (Mill.) K.  
 Koch  
Juglans nigra L.

## Juncaceae

Juncus tenuis Willd.

## Labiatae

Blephilia ciliata (L.)  
 Benth.  
Nepeta cataria L. \*  
Prunella vulgaris L. var.  
lanceolata (Bart.) Fern. \*  
Teucrium canadense L.  
 var. occidentale (Gray)  
 McClintock & Epling

## Leguminosae

Amphicarpa bracteata (L.)  
 Fern.  
Desmodium glutinosum  
 (Muhl.) Wood  
Gleditsia triacanthos L.  
Lespedeza violacea (L.)  
 Pers.  
Medicago lupulina L. \*  
Melilotus alba Desr. \*  
Robinia pseudoacacia L. P  
Trifolium pratense L. \*  
Trifolium repens L. \*

## Liliaceae

- Allium tricoccum Ait. var.  
burdickii Hanes  
Allium canadense L.  
Asparagus officinalis L. \*  
Erythronium albidum Nutt.  
Hemerocallis fulva L. \*P  
Polygonatum commutatum  
(Schult.) A. Dietr.  
Smilacina racemosa (L.)  
Desf.  
Uvularia grandiflora Sm.

## Malvaceae

- Sida spinosa L. \*

## Menispermaceae

- Menispermum canadense L.

## Moraceae

- Humulus lupulus L.  
Humulus japonicus Sieb. &  
Zucc. \*  
Maclura pomifera (Raf.)  
Schneider \*  
Morus alba L. \*

## Oleaceae

- Syringa vulgaris L. \*P

## Onagraceae

- Circaea quadrisculcata  
(Maxim.) Franch. & Sav.  
var. canadensis (L.) Hara  
Oenothera biennis L.

## Orchidaceae

- Orchis spectabilis L.

## Oxalidaceae

- Oxalis stricta L.

## Papaveraceae

- Dicentra cucullaria (L.)  
Bernh.

## Phrymaceae

- Phryma leptostachya L.

## Plantaginaceae

- Plantago lanceolata L. \*  
Plantago rugelii Dcne.

## Poaceae

- Agrostis hyemalis (Walt.)  
BSP.  
Agrostis alba L. \*  
Alopecurus carolinianus  
Walt.  
Aristida oligantha Michx.  
Brachyelytrum erectum  
(Schreb.) Beauv.  
Bromus tectorum L. \*  
Bromus japonicus Thunb. \*  
Bromus inermis Leyss. \*  
Bromus pubescens Muhl.  
Cinna arundinacea L.  
Dactylis glomerata L. \*  
Diarrhena americana  
Beauv. var. obovata  
Gleason  
Digitaria ischaemum  
(Schreb.) Muhl.  
Echinochloa pungens  
(Poir.) Rydb.  
Elymus hystrix L.  
Elymus virginicus L.  
Elymus villosus Muhl.  
Festuca pratensis Huds. \*  
Festuca obtusa Biehler  
Glyceria striata (Lam.)  
Hitchcock  
Hordeum pusillum Nutt.  
Hordeum jubatum L.  
Leersia virginica Willd.  
Muhlenbergia bushii Pohl  
Panicum dichotomiflorum  
Michx.  
Panicum capillare L.  
Phleum pratense L. \*  
Poa pratensis L. \*  
Poa sylvestris Gray  
Setaria faberi Herrm. \*

## Polemoniaceae

- Phlox divaricata L. ssp.  
laphamii (Wood) Wherry  
Polemonium reptans L.

## Polygonaceae

- Polygonum scandens L.  
Polygonum aviculare L. \*  
Polygonum erectum L.  
Polygonum virginianum L.  
Polygonum punctatum Ell.  
Polygonum pennsylvanicum L.  
Polygonum pennsylvanicum L.  
 var. laevigatum Fern.  
Rheum rhaponticum L. \*P  
Rumex crispus L. \*

## Portulacaceae

- Claytonia virginica L.

## Ranunculaceae

- Anemone canadensis L.  
Anemone virginiana L.  
Anemonella thalictroides (L.)  
 Spach  
Aquilegia canadensis L. P  
Delphinium tricornem Michx.  
Hydrastis canadensis L.  
Paeonia lactiflora Pall. \*P  
Ranunculus abortivus L.  
Ranunculus septentrionalis  
 Poir.  
Thalictrum revolutum DC.

## Rosaceae

- Agrimonia pubescens Wallr.  
Crataegus crus-galli L.  
Crataegus calpodendron (Ehrh.)  
 Medic.  
Crataegus mollis (Torr. & Gray)  
 Scheele  
Fragaria virginiana Duchesne  
Geum canadense Jacq.  
Geum vernum (Raf.) Torr. & Gray  
Malus pumila Mill. \*P  
Potentilla simplex Michx.  
Potentilla norvegica L.  
Prunus americana Marsh. var.  
lanata Sudw.  
Prunus virginiana L.  
Rosa canina L. \*P  
Rosa gallica L. \*P  
Rosa multiflora Thunb. \*  
Rubus occidentalis L.  
Rubus allegheniensis Porter

## Rubiaceae

- Galium circaezans Michx.  
Galium triflorum Michx.  
Galium aparine L.  
Galium concinnum Torr. &  
 Gray

## Rutaceae

- Xanthoxylum americanum  
 Mill.

## Salicaceae

- Populus deltoides Marsh.  
 P+S  
Salix babylonica L. \*P

## Saxifragaceae

- Ribes missouriense Nutt.

## Scrophulariaceae

- Gratiola neglecta Torr.  
Penstemon digitalis Nutt.  
Scrophularia marilandica  
 L.  
Verbascum thapsus L. \*  
Veronica peregrina L.  
Veronicastrum virginicum  
 (L.) Farw.

## Simaroubaceae

- Ailanthus altissima  
 (Mill.) Swingle \*

## Smilacaceae

- Smilax hispida Muhl.  
Smilax lasioneuron Hook.  
Smilax ecirrata (Engelm.)  
 S. Wats.

## Solanaceae

- Physalis heterophylla  
 Nees  
Solanum carolinense L.  
Solanum americanum Mill.

## Tiliaceae

- Tilia americana L.

## Ulmaceae

- Celtis occidentalis L.



Celtis occidentalis L. var.  
canina(Raf.) Sarg.  
Ulmus rubra Muhl.  
Ulmus americana L.

## Umbelliferae

Chaerophyllum procumbens  
(L.) Crantz  
Cryptotaenia canadensis (L.)  
DC.  
Osmorhiza longistylis (Torr.)  
DC.  
Osmorhiza longistylis (Torr.)  
DC. var. villicaulis Fern.  
Osmorhiza claytonii (Michx.)  
Clarke  
Pastinaca sativa L. \*  
Sanicula gregaria Bickn.  
Thaspium barbinode (Michx.)  
Nutt.

## Urticaceae

Laportea canadensis (L.)  
Wedd.

Pilea pumila (L.) Gray  
Urtica dioica L.

## Verbenaceae

Verbena urticifolia L.

## Violaceae

Viola pratincola Greene  
Viola missouriensis  
Greene  
Viola sororia Willd.  
Viola pubescens Ait. var.  
eriocarpa (Schwein.)  
Russell

## Vitaceae

Parthenocissus quin-  
quefolia (L.) Planch.  
Vitis labruscana Bailey P  
Vitis riparia Michx.

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